WHAT IS CLAIMED IS:

1. An active matrix display device using a thin film transistor as a switching element in the displaying portion or driving portion wherein said thin film transistor comprises an insulating substrate on which a gate electrode, a gate insulating film, a semiconductor layer, a drain electrode, a source electrode and a passivation film are successively laminated, and the surface portion of the semiconductor layer on the passivation film side is porous.

2. An active matrix display device according to claim 1, wherein depth of the porous portion is not less than 1 nm and not more than 30 nm from the surface of the semiconductor layer on the passivation film side.

3. An active matrix display device according to claim 1, wherein volume of the voids is not less than 5% in the porous area of not less than 1 nm and not more than 30 nm from the surface of the semiconductor layer on the passivation film side.

4. An active matrix type display device according to claim 1, wherein the average value of radius of the voids in the porous portion is not more than 5 nm.

5. An active matrix display device according to claim 1, wherein not less than 0.01 atom % and not more than 0.1 atom % of helium is contained in the porous area of not more than 30 nm in depth from the surface

of the semiconductor layer on the passivation film side.

6. An active matrix display device according to claim 1, wherein the passivation film is of an organic resin.

7. An active matrix display device according to claim 1, wherein a picture element electrode formed on the passivation film of the switching element overlaps the switching element.

8. An active matrix display device according to claim 1, wherein a common electrode formed on the passivation film of the switching element overlaps the switching element.

9. An active matrix display device according to claim 1, wherein the current value between the source electrode and the drain electrode in the case of applying a voltage of -40 V to +40 V to a second electrode (a back gate electrode) provided on the switching element is not more than 10 times the current value between the source electrode and the drain electrode in the case of providing no back gate electrode.

10. A method for making a thin film transistor which comprises the following steps:

a step of forming successively a gate insulating film, a semiconductor layer and a contact layer on a gate electrode formed on an insulating substrate, and etching the semiconductor layer and the

contact layer in the form of islands,

a step of forming a metallic layer on the substrate after subjected to the preceding step and forming a drain electrode and a source electrode by etching the metallic layer,

a step of removing by etching the impurity semiconductor layer and a part of the semiconductor layer which are exposed between the drain electrode and the source electrode on the substrate after subjected to the preceding step,

a step of irradiating with ion the surface of the semiconductor layer exposed between the drain electrode and the source electrode on the substrate after subjected to the preceding step, thereby making porous the surface of the semiconductor layer, and

a step of forming a passivation film on the substrate after subjected to the preceding step.

11. A method for making a thin film transistor according to claim 10, wherein the ion irradiated to the surface of the semiconductor layer exposed between the drain electrode and the source electrode on the substrate is He ion.

12. A method for making a thin film transistor which comprises the following steps:

a step of forming successively a gate insulating film, a semiconductor layer and a contact layer on a gate electrode formed on an insulating substrate, and etching the semiconductor layer and the

contact layer in the form of islands,

a step of forming a metallic layer on the substrate after subjected to the preceding step and forming a drain electrode and a source electrode by etching the metallic layer,

a step of removing by etching the contact layer and a part of the semiconductor layer which are exposed between the drain electrode and the source electrode on the substrate after subjected to the preceding step,

a step of making porous the surface of the semiconductor layer exposed between the drain electrode and the source electrode on the substrate after subjected to the preceding step by anode oxidation method, and

a step of forming a passivation film on the substrate after subjected to the preceding step.

13. A method for making a thin film transistor which comprises the following steps:

a step of forming successively a gate insulating film, a semiconductor layer and a contact layer on a gate electrode formed on an insulating substrate, and etching the semiconductor layer and the contact layer in the form of islands,

a step of forming a metallic layer on the substrate after subjected to the preceding step and forming a drain electrode and a source electrode by etching the metallic layer,

a step of removing by etching the contact layer and a part of the semiconductor layer exposed between the drain electrode and the source electrode on the substrate after subjected to the preceding step,

a step of coating a self-organized resist comprising in combination two macromolecules differing in molecular weight on the surface of the semiconductor layer exposed between the drain electrode and the source electrode on the substrate after subjected to the preceding step, annealing the coat and, then, etching fine particles in the self-organized macromolecule mixture and the semiconductor layer under the fine particles, thereby making porous the surface of the semiconductor layer, and

a step of forming a passivation film on the substrate after subjected to the preceding step.

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